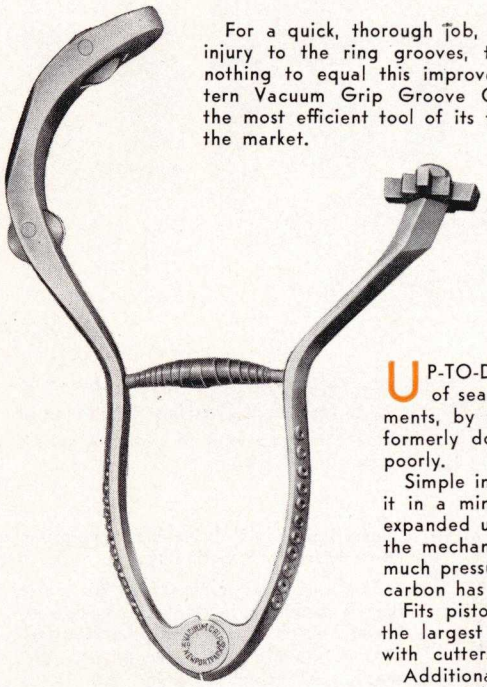
Vacuum Grip Tools
REG. U.S. PAT. OFF.

BUILT UP TO A STANDARD
NOT DOWN TO A PRICE

SPECIAL PURPOSE TOOLS

PISTON RING GROOVE CLEANER No. 50

For Automotive and Gas Engine Use



For a quick, thorough job, without injury to the ring grooves, there is nothing to equal this improved pattern Vacuum Grip Groove Cleaner, the most efficient tool of its type on the market.

UP-TO-DATE service stations recognize the necessity of seating piston rings properly when making replacements, by removing *all* carbon from the grooves—a job formerly done with makeshift tools, and often done very poorly.

Simple in operation. Any mechanic can learn how to use it in a minute. Self-adjusting—the spring keeps the jaws expanded until pressure is applied to the handles. Enables the mechanic to determine by the sense of touch just how much pressure to apply to avoid cutting into groove, after carbon has been removed.

Fits pistons of all diameters from the smallest 2¾" to the largest 5⅝". Quickly adjusted cutter wheel is fitted with cutters in the following sizes: $\frac{3}{32}$", $\frac{1}{8}$", $\frac{5}{32}$", $\frac{3}{16}$".

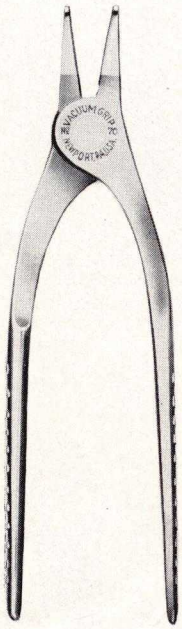
Additional cutter wheels fitted with cutters for piston grooves 9/64"—¼"—$\frac{5}{16}$"—⅜", each 50c.

No. 50 Length 9" $2.50

Satin Finish

BRAKE PLIERS No. 70

Horse Shoe Lock Pattern



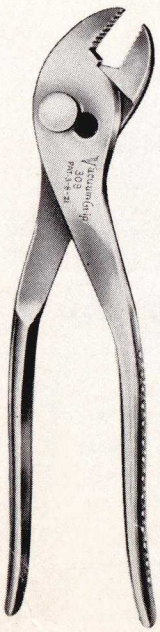
For use on all cars equipped with hydraulic and mechanical brakes. Save time and labor in the trying operation of removing the horse shoe lock washer. The difficulty encountered in removing this washer, which fits over the anchor pin that holds the brake shoe in place, is well know to mechanics experienced in brake overhaul. Made with jaw tips bent at a right angle, and tips of jaws serrated on outside to prevent slipping, No. 70 gets instant action. Every shop rendering hydraulic and mechanical brake service needs this efficient tool, which quickly pays for itself in time saved.

No. 70 Length 7" $1.35

Full Polished Finish

BATTERY AND GENERAL PURPOSE PLIERS No. 308

Improved Adjustable Jaw Type



This skilfully designed tool, developed from Vacuum Grip Battery Pliers of the riveted joint type, handles all battery terminals without injury to top of jar. While made primarily for battery service it is valuable for general gripping purposes and nut turning. Especially handy for working on auxiliary parts.

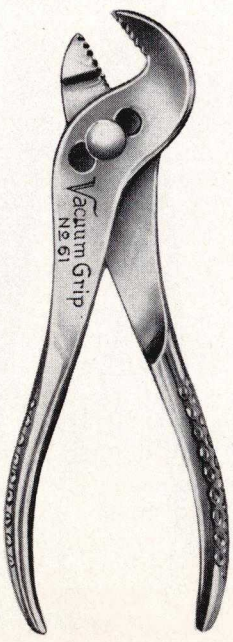
Slide joint gives a maximum jaw opening of 1¼", parallel at all openings. Has thin tapered nose offset at 30° angle for "getting around the corners" and working in confined spaces. The long handles, full fashioned for hand comfort, give extra reach and also furnish greater leverage, with increased power in proportion.

No. 308 Length 8" $1.50

Full Nickel Finish

ANGLE NOSE GRIPPERS Nos. 61 and 62

Three-Adjustment Slide Joint



A new Vacuum Grip pattern, designed in response to a growing demand for gripping pliers of unusual power plus the widest possible range of jaw openings.

These pliers will be welcomed by automotive, airplane and other mechanics whose work includes a number of gripping operations. The teeth are sharp and deeply milled, affording a sure grip on nuts, bolts, rods, pipes etc. The jaws, offset at an angle of 30°, and parallel at all openings, put this pattern in the wrench class. In fact, either size will take the place of a number of wrenches.

Very strong in construction, for heavy duty service.

No. 61 Length 6" $1.25
No. 62 Length 8" 1.50

Full Nickel Finish

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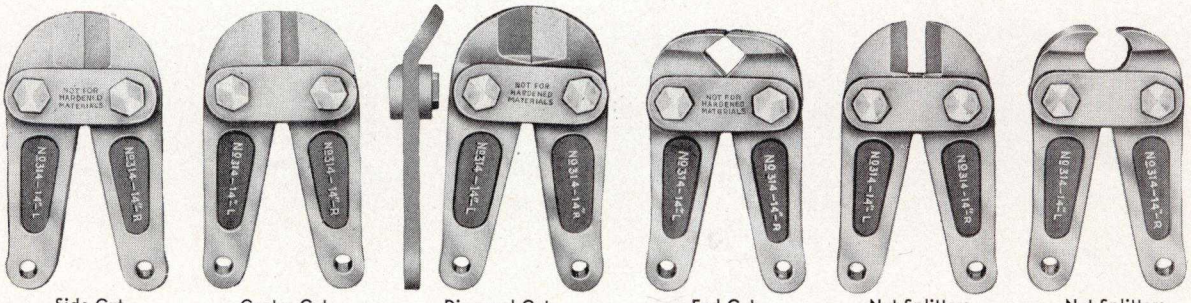
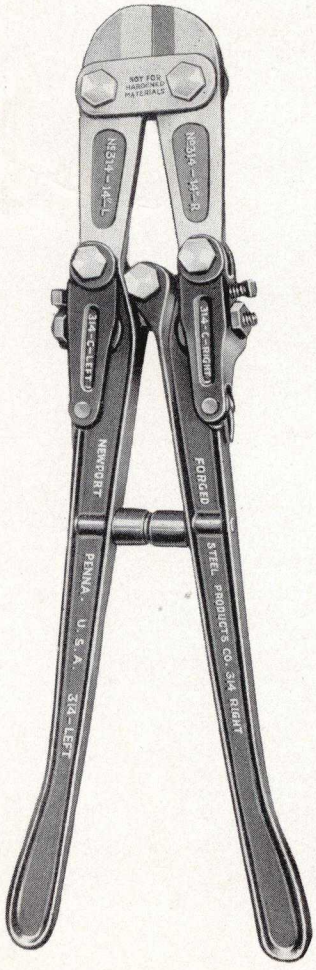
VACUUM GRIP BOLT CUTTERS



Side-Cut Assembly | Center-Cut Assembly | Diagonal-Cut Assembly | End-Cut Assembly | Nut-Splitters Center-Cut | Nut-Splitters End-Cut

A Blade for Every Type of Cutting Service



THE most powerful and strongest tool of its type made. Designed on the compound lever principle, which multiplies hand power tremendously, making the toughest cutting jobs easy. A true "overcapacity" cutter that does the work of ordinary cutters measuring from one-quarter to one-third longer!

Very strong in construction. Handles of highest grade malleable steel. Blades hammer forged from a special formula electric furnace tool steel alloy of the utmost toughness—identical with the steel used in the famous line of Vacuum Grip Pliers. Blades accurately aligned and hand-edged—and kept in alignment by a special type of bearing plate assembled with heat treated cap screws. All blade assemblies interchangeable as a unit by means of two bolts. Adjusting screws (see illustration at left) bring blades together to compensate for grinding.

The long life of these cutters makes them a profitable investment, an economy feature which recommends them to Purchasing Agents in the Telephone, Telegraph and Electric Light and Power Fields. An indispensable item in the tool bin of the automotive repair shop. And an ideal cutter for the personal tool kit of the garage mechanic.

SIZES AND PRICES

BOLT CUTTERS

Prices are for Cutters Complete with Blades

No. 314—14". Shears bolts and rods up to $\frac{5}{16}$" with ease. Complete with side-cut type blades $4.00
No. 314-C—With center-cut blades 4.25
No. 314-E—With end-cut blades 4.40
No. 314-D—With diagonal-cut blades 4.40
No. 318—18". Cutting capacity $\frac{3}{8}$". Complete with side-cut type blades 5.00
No. 318-C—With center-cut blades 5.25
No. 318-E—With end-cut blades 5.50
No. 318-D—With diagonal-cut blades 5.50
No. 324—24". Cutting capacity $\frac{1}{2}$". Complete with side-cut type blades 6.50
No. 324-C—With center-cut blades 6.75
No. 324-E—With end-cut blades 7.00
No. 324-D—With diagonal-cut blades 7.00
No. 336—36". Cutting capacity $\frac{3}{4}$". With side-cut or center-cut type blades 9.00

BLADE ASSEMBLIES

Prices are for Blade Assembly Only

No. 314-S.B.—Side-cut blades $1.60
No. 314-C.B.—Center-cut blades 1.85
No. 314-E.B.—End-cut blades 2.00
No. 314-D.B.—Diagonal-cut blades 2.00
No. 314-C.N.S.B.—Nut Splitter center-cut blades 1.60
No. 314-E.N.S.B.—Nut Splitter end-cut blades 2.00
No. 318-S.B.—Side-cut blades 2.00
No. 318-C.B.—Center-cut blades 2.25
No. 318-E.B.—End-cut blades 2.50
No. 318-D.B.—Diagonal-cut blades 2.50
No. 318-C.N.S.B.—Nut Splitter center-cut blades 2.00
No. 318-E.N.S.B.—Nut Splitter end-cut blades 2.50
No. 324-S.B.—Side-cut blades 2.50
No. 324-C.B.—Center-cut blades 2.75
No. 324-E.B.—End-cut blades 3.00
No. 324-D.B.—Diagonal-cut blades 3.00
No. 336-S.B.—Side-cut blades 3.50
No. 336-C.B.—Center-cut blades 3.50

Specially hardened center-cut blades for cutting hardened substances, at slight additional cost

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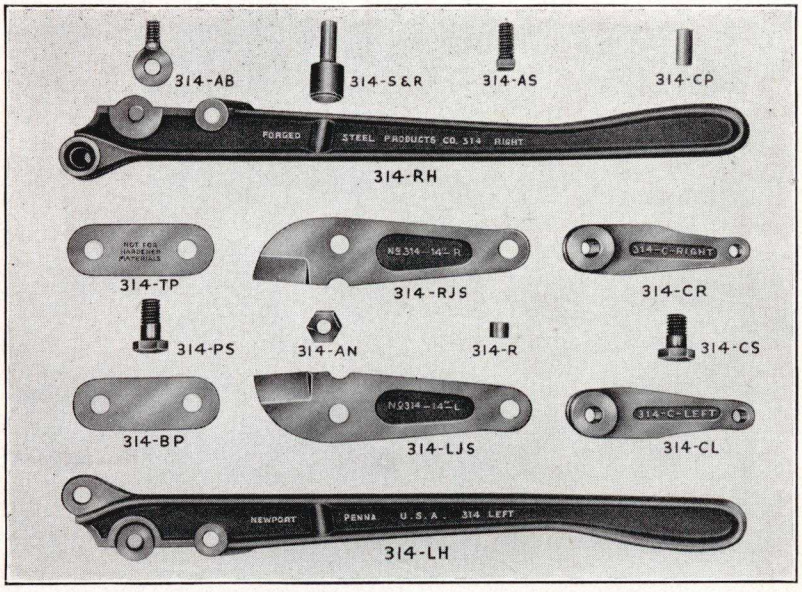
VACUUM GRIP BOLT CUTTERS

All parts of Vacuum Grip Bolt Cutters are interchangeable in their respective Bolt Cutter sizes, and are sold with the Guarantee that any part used for replacement will fit accurately.



Identify the part or parts wanted from illustration at left, except Diagonal, End and Center-Cut Blades Parts. Order by letter, first column, being sure to state size of Bolt Cutter for which part is wanted.

LIST PRICES OF PARTS

	No. 314 Price Each	No. 318 Price Each	No. 324 Price Each	No. 336 Price Each
RH—Right Handle	.45	.55	.85	1.35
LH—Left Handle	.45	.55	.85	1.35
RJS—Right Blade Side-Cut	.68	.85	1.00	1.45
LJS—Left Blade Side-Cut	.68	.85	1.00	1.45
CR—Clamp Right	.25	.30	.35	.45
CL—Clamp Left	.25	.30	.35	.45
TP—Top Plate	.35	.45	.50	.55
BP—Bottom Plate	.35	.45	.50	.55
AS—Adjusting Screw	.10	.15	.20	.25
AN—Adjusting Nut	.05	.07	.10	.12
AB—Adjusting Bolt	.20	.25	.30	.35

	No. 314 Price Each	No. 318 Price Each	No. 324 Price Each	No. 336 Price Each
S&R—Stop and Rubber	.10	.15	.18	.22
CP—Clamp Pin	.05	.07	.09	.12
PS—Plate Screw	.05	.07	.09	.12
CS—Cutter Screw	.05	.07	.09	.12
R—Roller	.05	.07	.09	.12
RJD—Right Blade Diagonal-Cut	.83	1.00	1.25	.....
LJD—Left Blade Diagonal-Cut	.83	1.00	1.25	.....
RJE—Right Blade End-Cut	.83	1.00	1.25	.....
LJE—Left Blade End-Cut	.83	1.00	1.25	.....
RJC—Right Blade Center-Cut	.70	.90	1.10	1.45
LJC—Left Blade Center-Cut	.70	.90	1.10	1.45

IGNITION PLIERS
No. 5

A handy little "vest pocket" tool with a gripping power far in excess of its size. Has specially milled teeth that just can't let go. Note the long handles and the short distance from end of nose to joint. That means hand power multiplied many times.

Very popular with automotive shop men for small nuts on the ignition system. Also handy for carburetor and fuel pump work, etc. In many cases makes small wrenches unnecessary.

Has easy riding joint and comfortable full fashioned handles. Hammer forged from the same tool steel alloy that has made Vacuum Grip Pliers famous for their resistance to wear.

No. 5 Length 5" 85c

Full Nickel Finish

VACUUM GRIP "SPECIAL"
No. 600-R

For Radio, Adding Machine and Car Radiator Work

Designed specially for Radio and adding machine work and now widely used by prominent manufacturers in these fields, where it has become immensely popular with mechanics. Also a favorite with automotive mechanics for radiator work.

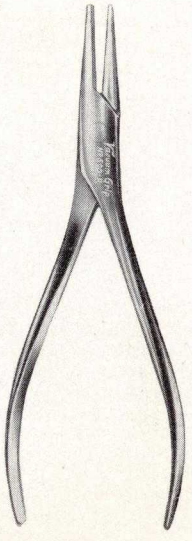
The long nose gets into inaccessible places where other pliers haven't a chance. A gripping tool of unusual power due to the tremendous leverage in the long handles.

Hammer forged from the toughest electric furnace tool steel alloy, tempered and hardened by an exclusive heat treatment process. Spring tempered handles.

Full Nickel Finish

No. 600-R—Nose $\frac{1}{16}$" width for auto radiator and adding machine work. Length 6"—$1.50.

No. 600-C—Nose $\frac{1}{4}$" width for Radio work. Length 6"—$1.50.



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KNITTING AND TEXTILE MILL PLIERS

THESE three exclusive Vacuum Grip patterns, now offered to the textile industry for the first time, were designed by our own skilled tool makers from specifications furnished by prominent knitting and hosiery mills.

They are "quality" tools in every sense, hammer forged from an electric furnace tool steel alloy, tempered and hardened by a special heat treatment. The handles are spring tempered for resilience, and are fashioned to a full bow for hand comfort and a powerful grip. A noteworhty feature of these patterns is the free riding joint, which enables the user to open the jaws at a touch.

FOR AUTOMOTIVE USE

We recommend Nos. T-1 and T-2 to garage mechanics for bending, straightening and shaping wire and metal parts. No other pliers can exactly duplicate the operations that these unique patterns will perform. Put a pair in your personal tool kit—you will find it a handy little tool in many ways.

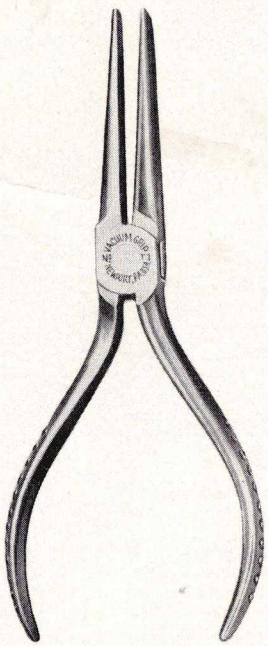
No. T-2
KNITTING MILL
"NEEDLE" PLIERS

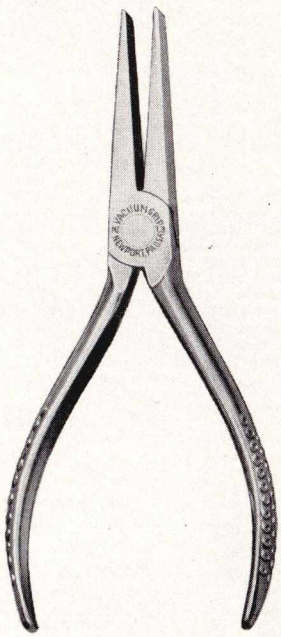
(Below)

Similar to No. T-1 but designed with a finer jaw taper for use in knitting machines in which the closely built character of the mechanical parts makes it necessary to use pliers of extra slenderness. Also slightly longer than No. T-1, for extra reach.

No. T-2 Length 6½" $1.50

Full Polished Finish





No. T-1
KNITTING MILL
"NEEDLE" PLIERS

Mechanics in knitting and hosiery mills will appreciate these special purpose pliers, designed for pulling and inserting needles in knitting machines. The jaws ("duckbill" type) have a width of $\frac{5}{16}$" at the tips and are extremely rugged in construction, insuring a positive hold on the needle or other object grasped.

No. T-1 Length 6" $1.50

Full Polished Finish

No. T-3
TEXTILE MILL
REED PLIERS

This special pattern will prove an efficient helper to loom fixers and others in textile mills, for keeping the reeds straightened. Inner gripping surfaces specially milled. One jaw convex and the other concave to make for a sure grip on reeds. A strong, husky tool of remarkable gripping power, indispensable for the work on which it is used.

No. T-3 Length 5¾" $2.00

Full Polished Finish